

CLAIMS

1. A method for separating single stranded nucleic acid material from double stranded nucleic acid material comprising contacting a mixture of the both with a liquid comprising a chaotropic agent and a nucleic acid binding solid phase,
5 whereby the liquid has a composition such that double stranded nucleic acid binds to the solid phase and a substantial amount of single stranded nucleic acid does not bind to the solid phase from the liquid.
2. A method according to claim 1 whereby the liquid
10 comprises at least 100 mM EDTA and comprising a guanidinium salt, preferably guanidinium thiocyanate as a chaotropic agent.
3. A method according to claim 1 or 2, whereby the solid phase is silicium based.
- 15 4. A method according to claim 3 whereby the solid phase is silica.
5. A method according to claim 4 whereby the silica is in the form of particles having a size between 0.05 and 500, preferably 0.1 and 200 μm .
- 20 6. A method according to anyone of the foregoing claims whereby the solid phase is separated from the supernatant by centrifugation.
7. A method for isolating single stranded nucleic acid material from a mixture of nucleic acid material, comprising
25 the steps of subjecting the mixture to a method according to anyone of the foregoing claims and treating the supernatant containing the single stranded nucleic acid material with a second liquid comprising a chaotropic agent and a second nucleic acid binding solid phase, whereby the second liquid
30 has a composition such that the resulting mixture of supernatant and second liquid allow for binding of the single stranded nucleic acid material to the second solid phase.
8. A method for amplifying single stranded nucleic acid material comprising the steps of hybridizing the single

stranded nucleic acid with primers and elongating the probes using an enzyme which adds nucleotides to the primer sequence using the hybridized single strand material as a template, whereby at least one primer comprises a random hybridizing sequence and an amplification motif.

5. A method according to claim 8 whereby at least one primer comprising a random hybridization sequence and an amplification sequence further comprises a label.

10. A method according to claim 8 or 9 whereby at least one primer comprising a random hybridizing sequence and an amplification motif further comprises a direct sequencing motif.

15. A method for isolating and amplifying single stranded nucleic acid material originally present in a mixture of nucleic acids comprising subjecting the mixture to a method according to anyone of claims 1-7 followed by subjection of the isolated material to a method according to anyone of claims 8-10.

20. A method according to any one of the foregoing claims whereby the single stranded nucleic acid material comprises mRNA.

25. A method according to claim 12 whereby the mRNA is converted into cDNA.

13. A method according to anyone of the foregoing claims comprising a gel electrophoresis step.

14. A method according to anyone of the foregoing claims followed by a sequencing step.